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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER SIEFKE, SAMUEL P	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* STEPHEN B. ROSCOE, NEAL A. RAKOW,  
MICHAEL L. HUSBERG, and  
LESTER H. McINTOSH III

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Appeal 2009-0006  
Application 10/669,276  
Technology Center 1700

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Decided:<sup>1</sup> February 9, 2009

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Before ADRIENE LEPIANE HANLON, JEFFREY T. SMITH, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

HANLON, *Administrative Patent Judge*.

DECISION ON APPEAL

A. STATEMENT OF THE CASE

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is an appeal under 35 U.S.C. § 134 from an Examiner's final rejection of claims 1-18, 20, 42, 43, and 45. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.

The following Examiner's rejections are before us on appeal:

Claims 1-18, 20, 42, 43, and 45 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Mak<sup>2</sup> and Bennett.<sup>3</sup>

Claims 1-18, 20, 42, 43, and 45 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Mak and Grass.<sup>4</sup>

Claims 1 and 42 are the only independent claims on appeal. Claims 1-18 and 20 relate to a system for measuring diffusion of a compound across a membrane, and claims 42, 43, and 45 relate to a system, in kit form, for holding a membrane.

Claim 1 is representative of the subject matter on appeal and reads as follows:

1. A system for measuring diffusion of a compound across a membrane comprising:

a first base having first and second opposed surfaces and having a plurality of hollow projections extending outwardly from the first surface, each hollow projection having a tapered tip with an opening therein and a respective cavity contiguous with the opening disposed within the projection;

a second base having first and second opposed surfaces, the first surface of the second base having a plurality of recessed tapered openings therein adapted to engage the plurality of hollow projections, each recessed tapered opening

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<sup>2</sup> US 5,490,415 issued to Mak et al. on February 13, 1996.

<sup>3</sup> US 4,511,534 issued to Bennett, Jr. et al. on April 16, 1985.

<sup>4</sup> US 5,591,636 issued to Grass on January 7, 1997.

being contiguous with a respective cavity that extends into the second base;

a membrane contacting the recessed tapered openings and the tips of the hollow projections, wherein the first base is fastened to the second base by a first fastening means, and wherein: a) each cavity within a hollow projection extends through the first base and forms an opening at the second surface of the first base; or b) each cavity within the second base extends through the second base and forms an opening at the second surface of the second base; or c) each cavity within a hollow projection extends through the first base and forms an opening at the second surface of the first base, and each cavity within the second base extends through the second base and forms an opening at the second surface of the second base; and

a retaining plate having perforations therein adapted to allow the hollow projections to pass therethrough, wherein the retaining plate is fastened to the second base by a second fastening means, wherein the membrane is disposed between the second base and the retaining plate.

Br. 13, Claims Appendix.<sup>5</sup>

#### B. ISSUE

The Examiner contends that it would have been obvious to one of ordinary skill in the art to modify the diffusion test apparatus of Mak with a retaining plate to hold the membrane to the second base in view of the teachings in Bennett or Grass. Ans. 5, 7.<sup>6</sup>

The Appellants contend that the Examiner has used impermissible hindsight to conclude that it would have been obvious to one of ordinary skill in the art to modify the diffusion test apparatus of Mak with a retaining plate. See Br. 8-12.

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<sup>5</sup> Appeal Brief dated October 11, 2007.

<sup>6</sup> Examiner's Answer dated January 10, 2008.

Thus, the sole issue on appeal is:

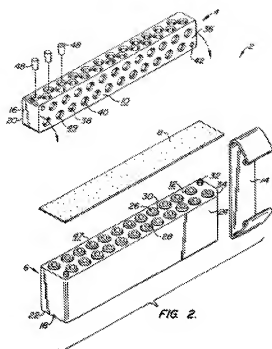
Do the teachings of Bennett or Grass suggest modifying the diffusion test apparatus of Mak with a retaining plate as recited in claims 1 and 42?

### C. ANALYSIS

Claim 1 recites a system comprising a first base fastened to a second base by a first fastening means and a retaining plate fastened to the second base by a second fastening means, wherein a membrane is disposed between the second base and the retaining plate. Br. 13, Claims Appendix. Thus, according to claim 1, the first base *and* the retaining plate are fastened to the second base by the first and second fastening means, respectively.

Similarly, claim 42 recites a system, in kit form, comprising a first base, a second base, and a means for fastening the first base to the second base. The system also includes a retaining plate and means for fastening the retaining plate to the second base. Br. 16, Claims Appendix.

Mak Figure 2 illustrates a diffusion test apparatus. Mak 5:46-47. Figure 2 is reproduced below:



Mak Figure 2 depicts a diffusion assembly.

The diffusion assembly 2 includes a donor assembly 4 which mounts to a receiver assembly 6 and a membrane 8 secured between the donor face 10 of donor assembly 4 and the receiver face 12 of receiver assembly 6. Mak 5:58-61. The donor assembly 4 corresponds to the claimed “second base,” and the receiver assembly 6 corresponds to the claimed “first base.” See Ans. 4.

The donor assembly 4 (i.e., second base) and the receiver assembly 6 (i.e., first base) are secured to one another by fastening means 14. Mak 5:61-64.

The Examiner found that Mak does not teach a retaining plate for retaining the membrane 8 to the donor assembly 4 (i.e., second base). Ans. 5. However, the Examiner found that Bennett and Grass each disclose a retaining plate within the scope of claim 1. Ans. 5, 7.

Bennett Figure 3 illustrates a liquid transfer device. Bennett 3:12-17. Figure 3 is reproduced below:

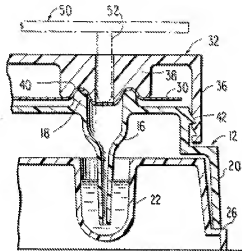


FIG. 3

Bennett Figure 3 depicts a liquid transfer device. The Examiner found that the liquid transfer device disclosed in Bennett “comprises a second base 32 and a retaining plate 42 [sic, 12] which holds a membrane [30] to the second base 32 by removable fasteners 42 as seen in figure 2-4.” Ans. 5. However, the Examiner did not find that Bennett discloses a “first base” that is also fastened to the second base 32. Without such a disclosure, the teachings of Bennett add nothing to the teachings of Mak. That is, as in the Mak device, the Bennett device merely comprises two “bases” (i.e., second base 32 and retaining plate 42/12) fastened together with a membrane secured therebetween.

Grass Figure 2 illustrates a membrane holder. Grass 3:14-15. Figure 2 is reproduced below:

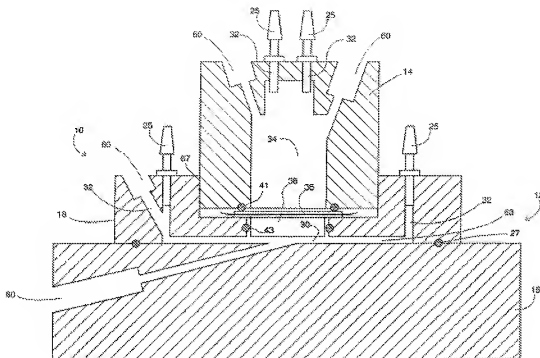


FIG - 2

Grass Figure 2 depicts a membrane holder.

The Examiner found:

Grass teaches a membrane holder that comprises an upper base 14, a retaining plate 18 and a lower base 16. A membrane is placed between the upper base and the retaining plate 18 and held together by means of a threaded connection between the upper base and the retaining plate (col. 3, line 44-50). The retaining plate is attached to the base plate by bolts 20.

Ans. 7.

The Examiner did not find that the lower base 16 is fastened to the upper base 14 in the Grass device. Thus, as with Bennett, the teachings of Grass add nothing to the teachings of Mak. That is, as in the Mak device,



the Grass device merely comprises two “bases” (i.e., upper base **14** and retaining plate **18**) fastened together with a membrane secured therebetween.

For the reasons set forth above, the teachings of Bennett or Grass do not suggest modifying the diffusion test apparatus of Mak with a retaining plate as recited in claims 1 and 42.

D. DECISION

The rejection of claims 1-18, 20, 42, 43, and 45 under 35 U.S.C. § 103(a) as unpatentable over the combination of Mak and Bennett is reversed.

The rejection of claims 1-18, 20, 42, 43, and 45 under 35 U.S.C. § 103(a) as unpatentable over the combination of Mak and Grass is reversed.

REVERSED

PL Initial:  
sld

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